

ABSTRACT OF THE DISCLOSURE

A power LED high in light extraction efficiency is obtained without increasing the operation voltage and degrading the reliability. The power LED comprises:  
5 epitaxial growth layers including a first conductive type clad layer, an active layer made of an InGaAlP compound semiconductor on said first conductive type clad layer to generate light, and a second conductive  
10 type clad layer formed on said active layer; and a transparent first conductive type GaP substrate made of GaP with a thickness of equal to or more than 150  $\mu\text{m}$  and having a first surface, said first surface having an area equal to or wider than 0.1  $\text{mm}^2$  and bonded to a  
15 bonding surface of said first conductive type clad layer via no layer or via a bond layer, an area of said bonding surface of said first conductive type clad layer being smaller than said first surface of said substrate to locally expose said first surface or said bond layer.